

P24550.A06

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants : Hiroyuki HOJO et al.

**Group Art Unit: 3711**

Appl. No. : 10/758,019

**Examiner: Kien T. Nguyen**

Filed : January 16, 2004

**Confirmation No.: 5762**

For : BALANCE PRACTICING MACHINE

**SUBMISSION UNDER 37 C.F.R. § 1.114**

Commissioner for Patents  
U.S. Patent and Trademark Office  
Customer Service Window, Mail Stop Amendment  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Sir:

The present submission is being submitted along with a Request for Continued Examination filed concurrently herewith. Applicants respectfully request reconsideration and withdrawal of the outstanding rejections in view of the herein contained amendments and remarks.

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks** begin on page 8 of this paper.

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (Currently Amended) A balance practicing machine comprising:

a seat on which a user sits;

a drive mechanism that imparts a swinging motion to said seat;

an expandable and contractible member provided on a seating surface of said seat;

and

a mechanism that automatically repeatedly expands and contracts said expandable and contractible member during operation of the drive mechanism to provide compound motion to the seat.

2. (Original) The balance practicing machine according to claim 1, wherein said seat has a saddle shape.

3. (Original) The balance practicing machine according to claim 1, wherein said expandable and contractible member is positioned to oppose the thighs and knees of the user when the user sits on said seat.

4. (Original) The balance practicing machine according to claim 1, wherein said expandable and contractible member comprises a first expandable and contractible element and a second expandable and contractible element.

5. (Original) The balance practicing machine according to claim 4, wherein said first and second expandable and contractible elements are positioned on opposite sides of said seat.

6. (Original) The balance practicing machine according to claim 4, wherein said first and second expandable and contractible elements are positioned to oppose the thighs and knees of the user when the user sits on said seat.

7. (Original) The balance practicing machine according to claim 4, wherein said first and second expandable and contractible elements expand and contract in substantially opposite directions.

8. (Original) The balance practicing machine according to claim 4, wherein said first and second expandable and contractible elements are positioned to oppose the thighs and knees of the user when the user sits on said seat, so that the user's hip joints open and close when said first and second expandable and contractible elements expand and contract, respectively.

P24550.A06

9. (Original) The balance practicing machine according to claim 4, wherein said first and second expandable and contractible elements comprise a first air bladder and a second air bladder, respectively.

10. (Original) The balance practicing machine according to claim 9, wherein an air supply unit supplies air to said first and second air bladders.

11. (Original) The balance practicing machine according to claim 1, wherein said expandable and contractible member provides adjustability of size of said seat to accommodate a particular user's body type.

12. (Canceled)

13. (Previously Presented) The balance practicing machine according to claim 1, wherein an elevator mechanism is provided to raise and lower said seat.

14. (Original) The balance practicing machine according to claim 13, wherein said elevator provides adjustability of the height of said seat.

15. (Original) The balance practicing machine according to claim 13, wherein said elevator is repeatedly raised and lowered during operation of said drive mechanism to provide compound motion to said seat.

16. (Currently Amended) The balance practicing machine according to claim 12 1, wherein an elevator mechanism is provided to raise and lower said seat.

17. (Original) The balance practicing machine according to claim 16, wherein said elevator is repeatedly raised and lowered during operation of said drive mechanism to provide compound motion to said seat.

18. (Currently Amended) A balance practicing machine comprising:  
a seat;  
a drive mechanism that imparts a swinging motion to said seat; and  
a moving device that is repeatedly actuated during operation of said drive mechanism to provide compound motion to said seat,  
wherein said moving device comprises:  
an expandable and contractible member provided on a seating surface of said seat; and

P24550.A06

a mechanism that automatically repeatedly expands and contracts said expandable and contractible member during operation of the drive mechanism to provide compound motion to the seat.

19. (Canceled)

20. (Currently Amended) The balance practicing machine according to ~~claim 19~~  
claim 18, further comprising:

an elevator mechanism provided to raise and lower said seat;  
wherein said elevator is repeatedly raised and lowered during operation of said drive mechanism to provide additional compound motion to said seat.

21. (Previously Presented) The balance practicing machine according to claim 1,  
wherein the swinging motion comprises three degrees of freedom of movement to the seat  
in the form of a longitudinal (forward and backward) reciprocating linear motion and  
reciprocating pivoting motions around a fore-aft (longitudinal) and traverse axes.

22. (Previously Presented) The balance practicing machine according to claim 18,  
wherein the swinging motion comprises three degrees of freedom of movement to the seat  
in the form of a longitudinal (forward and backward) reciprocating linear motion and  
reciprocating pivoting motions around a fore-aft (longitudinal) and traverse axes.

23. (Previously Presented) The balance practicing machine according to claim 1, wherein the expandable and contractible member is provided integrally with the balance practicing machine.

24. (Previously Presented) The balance practicing machine according to claim 18, wherein the expandable and contractible member is provided integrally with the balance practicing machine.

REMARKS

Upon entry of the above amendment, claims 1, 16, 18, and 20 will have been amended, and claim 12 will have been canceled. Accordingly, claims 1-11, 13-18, and 20-24 are currently pending. Applicants respectfully request reconsideration of the outstanding rejection and allowance of claims 1-11, 13-18, and 20-24 in the present application. Such action is respectfully requested and is now believed to be appropriate and proper.

In the Office Action claim 20 is objected to under 37 C.F.R. 1.75 as being of improper dependent form for failing to further limit the subject matter of a previous claim. In response, claim 20 has been amended to depend from claim 18. Thus, in view of the above identified amendment and remarks, it is believed that the objection to claim 20 is now moot.

In the Office Action claims 1-18 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al., U.S. Patent No. 4,988,300 (hereinafter "Yamaguchi") in view of Friedson, U.S. Patent No. 6,332,307. This rejection is respectfully traversed.

The Examiner takes the position that it would have been obvious to modify the device of Yamaguchi with the inflatable bladder (25) of Friedson, which the Examiner has characterized as being an expandable and contractible member. In this regard, Applicants note that Yamaguchi appears to disclose a balance practicing machine (entitled RIDING SIMULATOR) including a seat (31) and a drive mechanism (FIG. 1, 7) that imparts a

P24550.A06

swinging motion to the seat. However, Yamaguchi does not disclose an expandable and contractible member provided on a seating surface of the seat; and a mechanism that expands and contracts said expandable and contractible member.

In the Response to Arguments, the Examiner has asserted that the term "repeatedly" in claims 1 and 18 limits as to how or how often, and/or when the mechanism "repeatedly" expands and contracts the member. The Examiner has further asserted that the valve 26 of Friedson is conceivably capable of repeatedly inflating (expanding) and deflating (contracting) the bladder 25.

Although Applicants do not necessarily agree with the Examiner's rejection of claims 1-18 and 21-24 on this ground, nevertheless, Applicants have amended independent claims 1 and 18 to clearly obviate the above noted ground of rejection in order to expedite prosecution of the present application. In this regard, Applicants note that YAMAGUCHI et al. and FRIEDSON fail to teach or suggest the subject matter claimed in amended claims 1 and 18. In particular, claims 1 and 18, as amended, set forth a balance practicing machine including, inter alia, a seat, a drive mechanism, an expandable and contractible member provided on the seating surface, and "a mechanism that automatically repeatedly expands and contracts said expandable and contractible member during operation of the drive mechanism to provide compound motion to the seat".

This amendment is fully supported by the specification, including the claims and drawings, and no prohibited new matter has been added. In particular, support for this

amendment can be found at least in paragraphs [0024] [0025], [0026] and [0033], and in claim 12, as originally filed.

The YAMAGUCHI et al. patent discloses a riding simulator. As recognized by the Examiner, the YAMAGUCHI et al. device does not include an expandable and contractible member, nor a "a mechanism that automatically repeatedly expands and contracts said expandable and contractible member during operation of the drive mechanism to provide compound motion to the seat", as set forth in amended claims 1 and 18.

The FRIEDSON patent is directed to a collapsible saddle assembly. As shown in figure 7 and as described in column 4, line 55 through column 5, line 10, the FRIEDSON device includes a cavity 21 that may be filled so as to "accommodate a different user or equestrian application". The cavity may be filled with a filler material such as wool stuffing or polyurethane; or the cavity may include a bladder filled with air. Although Friedson includes an access opening 23 for inserting and removing filler (*i.e.*, expanding and contracting the cavity) or the valve 26 for filling and removing air from the bladder (*i.e.*, expanding or contracting the bladder), FRIEDSON does not teach or suggest that the cavity could be expanded or contracted during operation of the drive mechanism to provide compound motion to the seat. In fact, the cavity of FRIEDSON could not be expanded or contracted during operation of the drive mechanism since the filler material could not be removed from the cavity during movement of the device. Accordingly, the FRIEDSON patent fails to teach or suggest a balance practicing machine including, inter alia, a seat, a drive mechanism, an expandable and contractible member provided on the seating

surface, and much less "a mechanism that automatically repeatedly expands and contracts said expandable and contractible member during operation of the drive mechanism to provide compound motion to the seat, as recited in claims 1 and 18, as amended. Therefore, the FRIEDSON patent fails to cure the deficiencies of the YAMAGUCHI et al. device, and even assuming, arguendo, that the teachings of YAMAGUCHI et al. and FRIEDSON could be properly combined, Applicants' claimed balance practicing machine would not have resulted from the combined teachings thereof.

Further, there is nothing in the cited prior art that would lead one of ordinary skill in the art to make the modification suggested by the Examiner in the rejection of claims 1 and 18 under 35 U.S.C. § 103(a) over YAMAGUCHI et al. in view of FRIEDSON. In this regard, YAMAGUCHI et al. is relevant to a balance practicing machine, whereas the device of FRIEDSON is relevant to a saddle for actual horse back riding. Thus, YAMAGUCHI et al. and FRIEDSON appear to be non-analogous art. Thus, the only reason to combine the teachings of YAMAGUCHI et al. and FRIEDSON results from a review of Applicants' disclosure and the application of impermissible hindsight. Accordingly, the rejection of claims 1 and 18 under 35 U.S.C. § 103(a) over YAMAGUCHI et al. in view of FRIEDSON is improper for all the above reasons and withdrawal thereof is respectfully requested.

Applicants submit that dependent claims 2-11, 13-17, and 20-24 which are at least patentable due to their dependency from claims 1 and 18 for the reasons noted above, recite additional features of the invention and are also separately patentable over the prior art of record based on the additionally recited features.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection, and an early indication of the allowance of claims 1-11, 13-18, and 20-24.

SUMMARY AND CONCLUSION

In view of the foregoing, it is submitted that the proposed amendment is proper for entry, and it is also submitted that none of the references of record, considered alone or in any proper combination thereof, anticipate or render obvious Applicants' invention as recited in claims 1-11, 13-18, and 20-24. The applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

Accordingly, consideration of the present amendment, reconsideration of the outstanding Final Official Action, and allowance of the present amendment and all of the claims therein are respectfully requested and now believed to be appropriate.

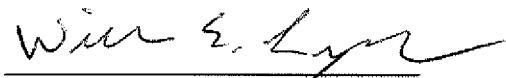
Applicants have made a sincere effort to place the present application in condition for allowance and believe that they have now done so.

Any amendments to the claims which have been made in this amendment, which do not narrow the scope of the claims, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered cosmetic in nature, and to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

P24550.A06

Should there be any questions, the Examiner is invited to contact the undersigned at the below listed number.

Respectfully submitted,  
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